

REMARKS

Claims 1-4, 6-9 and 13-17 currently appear in this application. The Office Action of April 13, 2007, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Claims 1-3, 6, 7 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kang et al., US Published Application 2002/0162456. This rejection is respectfully traversed.

In the Examiner's response to arguments, the Examiner concedes that Kang is connected only to surfaces such as the end of the pores via the connection between the support membrane and the solid polymer electrode. Claim 1 has now been amended to recite that the ionizable functional groups are attached to all of the surfaces of the pores. Support for this amendment can be found in the specification as filed at page 21, lines 22-24 and in Figure 1C.

Because in the presently claimed ionic conductor the ionizable functional groups are attached to the entire surfaces of the continuous pores, ions, such as univalent ions

or multivalent ions, can move freely through the pores. As a result, the ionic conductor claimed herein can exhibit excellent ionic conductivity. If the ionizable functional groups are attached to only certain portions of the surfaces of the continuous pores, ions cannot move through the pores.

None of the cited references discloses or suggests that the ionizable functional groups are attached to the entire surfaces of the continuous pores. The structure of Kang, in which the functional groups are attached to the end surfaces of the pores, is not useful in terms of ionic conductivity, because the ions cannot pass through the pores.

Claims 4 and 134 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kang et al. in view of Kwasniewski et al., US 5,863,420. This rejection is respectively traversed.

Claims 4 and 14 now require that the entire surfaces of the pores be attached to the ionizable functional groups. This is neither taught nor suggested by Kang. Kwasniewski adds nothing to Kang, because Kwasniewski merely teaches pore sizes that are useful in hydrophobic microporous membranes. There is nothing in Kwasniewski that discloses or suggests that the ionizable functional group should be attached to all surfaces of the pores.

Claims 1-4, 6, 7 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnabel et al., US 4,780,369. This rejection is respectfully traversed.

While Schnabel discloses that ionizable functional groups can be attached to the surface of the pores, there is nothing in Schnabel that teaches or suggests that these functional groups can be attached to the entire surfaces of the pores.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By: /Anne M. Kornbau/  
Anne M. Kornbau  
Registration No. 25,884

AMK:srd  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
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